

PEN'KOVA, V. S. Cand Agr Sci -- (diss) "On the doses and methods of introduction of lime in fields & grassland crop rotation." Len, 1957. 19 pp (Min of Higher Education USSR. Len Agr Inst), 100 copies (KL, 44-57, 101)

PEN'KOVA, V.S.

U S S R .

The effectiveness of liming acid podzolized soils. V. S.  
Pen'kova. Zemledie 3, No. 3, 71-4(1955).—Addns. of 7%  
chalcite contg. 59%  $\text{CaCO}_3$  increased the protein content  
of the clover-timothy hay mixt. from 10.38 to 12.1% while  
the cellulose content decreased from 35.62 to 33.52%.  
J. S. Jell.

PEN'KOVA, Ye. F.

USSR/Metals - Wolfram Alloys, Analysis

Dec 50

"Determination of Silicon in Wolfram-Columbium Alloys and Ferrowolfram," Ye. F. Pen'kova, P. Ya. Yakovlev, "Elektrostal'" Plant

"Zavod Lab" No 12, pp 1495-1497

Used ammonium oxalate to form sol complex compounds of Cb and W, and obtained ppt of silicic acid free from these elements. Expts proved that phosphoric acid keeps Cb and W in soln better. Developed so-called sulfuric-phosphoric acid method for detn of Si in W-Cb alloys and also in ferrowolfram.

182T94

PEN'KOVA, Ye. F.

PA 163T63

USSR/Metals - Steel, Titanium  
(Chemistry - Phosphorus, Determination

Jun 50

"Determination of Phosphorus in Steels and Alloys  
Containing Titanium," Ye. F. Pen'kova, A. M. Dmit-  
riyeva, P. Ya. Yakovlev, "Elektrostal'" Plant

"Zavod Lab" Vol XVI, No 6, pp 744-745

Describes method now in use in the "Elektrostal'"  
Plant for determination of phosphorus in presence of  
titanium and also procedure for determination of  
phosphorus in titanium dioxide. Suggests fusing of  
sample, in latter case, with sodium peroxide using  
iron crucible instead of platinum.

FDD

163T63

PENKOVICH, A.A.

Evaluation of the level of oxidative processes by means of oxymetry.  
Terap. arkh. 32 no. 4:72-76 S '60. (MIRA 14:1)  
(BLOOD--OXYGEN CONTENT)

PEN'KOVOY, K. I. (Khar'kov)

Characteristics of the clinical picture and surgical technic  
in neuroectodermal craniospinal tumors. Vop. neirokhirurgii  
no.3:42-46 '62. (MIRA 15:7)

1. Otdel neyrokhirurgii Ukrainskogo nauchno-issledovatel'skogo  
psikhonevrologicheskogo instituta.

(BRAIN—TUMORS) (SPINAL CORD—TUMORS)

PEN'KOVY, K.I. (Khar'kov)

Characteristics of the surgical treatment of benign intra-paravertebral tumors of the hourglass type. Vop. neurokhir. 27 no.2:41-46 Mr-Apr '63. (MIRA 17:2)

1. Otdel neyrokhirurgii (zav. - prof. M.S. Gorbachev)  
Ukrainskogo nauchno-issledovatel'skogo psikhonevrologicheskogo instituta.

PEN'KOVY, K.I.

Repeated operations in recurrences of benign intraparasagittal  
tumors (hormonal stage). Vop. neirokhir. no.5:53 '64.

(MIRA 18:10)

1. Otdel neyrokhirurgii (zav. - prof. M.S.Gorbachev; nauchnyy  
rukovoditel' -- prof. Ya.M.Pavlovskiy [deceased]) Ukrainskogo  
nauchno-issledovatel'skogo psikhonevrologicheskogo instituta,  
Khar'kov.



PAVLONSKIY, Ya.M., prof.; PEN'KOVY, K.I. (Khar'kov)

Surgical approaches to tumors of the brain through the incisura  
tentorii. Vop.neirokhir. no.2:24-27 '62. (MIRA 15:3)

1. Otdel neyrokhirurgii Ukrainskogo nauchno-issledovatel'skogo  
neyrokhirurgicheskogo instituta.  
(BRAIN--TUMORS) (BRAIN--SURGERY)

PEN'KOVY, K.I.

Tumors of the spinal cord of the "hourglass" type. Vop.  
neirokhir 24 no. 2:30-33 Mr-Sp '60. (MIRA 14:1)  
(SPINAL CORD--TUMORS)

PEN'KOVY, YE. D.

USSR/Engineering  
Fuel Conservation  
Efficiency, Industrial

Aug 48

"Standardization of Fuel and Heat Expenditure in Industrial Enterprises," S. F. Ivanov,  
Ye. D. Pen'kovoy, Engineers, 2 pp

"Za Ekonomiyu Topliva" Vol V, No 8

Points out some faulty practices in establishing progressive norms for factories.

PA 46/49T39

PENKOVSKAJA, A., med. m. kand.

Effectiveness of prolonged antibacterial therapy of recent forms of pulmonary tuberculosis. Sveik. Apsaug. no.3:12-18 '64.

1. Lietuvos respublikinis tuberkuliozes mokslinio tyrimo institutas.

PENKOVSKAJA, A., med.m. kand.

The effectiveness of prolonged antibacterial therapy of recent forms of pulmonary tuberculosis. Sveik. apsaug. 9 no.3:12-18  
Mr'64

1. Tuberkuliozes m.t. institutas.

\*

SLASTIKHIN, V.V.; PEN'KOVSKAYA, A.M.

Water for a nation's needs. Okhr. prir. Mold. no.3:23-24 '65.

(MIRA 18:10)

PEN'KOVSKAYA, A.T., kand.med.nauk; BAGROVA, Z.D.

Immediate and late results in treating tuberculosis of the  
lungs with antibacterial preparations. Probl.tub. 39 no.1:  
46-50 '61. (MIRA 14:1)

1. Iz Litovskogo nauchno-issledovatel'skogo instituta tuberkuleza  
(dir. - kand.med.nauk Yu.L. Gamperis, zam. dir. po nauchnoy chasti -  
prof. I.Ye. Kazakevich).  
(TUBERCULOSIS)

PEN'KOVSKAYA, Ye.F.

Seasonal development and effective utilization of meadow vegetation in the Kolyvan floodlands of the Ob River. Izv.Sib.otd.AN SSSR no.2:85-96 '60. (MIRA 13:6)

1. Institut biologii Sibirskogo otdeleniya AN SSSR.  
(Ob Valley--Pastures and meadows)



PEN'KOVSKAYA, Ye.F.

Vegetation of the floodplain of the Ob' River. Trudy TSU  
no. 211-263 '63.

Variability of meadow vegetation in the Kolyvan' area of the Ob'  
floodplain during a period of several years. Ibid. 264-277

Biological characteristics of some forage plants in the Ob'  
floodplain and their role in the structure of phytocenoses.  
Ibid.:278-284 (MIRA 17:7)

PEN'KOVSKAYA, Ye.F.; PAVLOVA, G.G.

Alpine meadows of the central Altai. Trudy Biol. inst. Zap.-Sib.  
fil. AN SSSR no.2:203-235 '56. (MIRA 13:10)  
(Altai Mountains--Pastures and meadows)

PEN'KOVSKAYA, Ye.F.

Principal wild perennial forage plants of Gorno-Altai meadows and  
pastures. Trudy Biol.inst. Zap.-Sib. fil. AN SSSR no.2:161-187 '56.  
(MIRA 13:10)  
(Gorno-Altai Autonomous Province--Forage plants)

PEN'KOVSKAYA, Ya.F.

Forest meadows of Shebalino District. Trudy Biol. inst. Zap.-Sib.  
fil. AN SSSR no.2:379-388 '56. (MIRA 13:10)  
(Shebalino District--Pastures and meadows)

PEN'KOVSKAYA-SHMUL'YAN, D. B.

USSR/Medicine - Anaphylaxis and Allergy  
Medicine - Blood Vessels

Jan 1948

"The Allergic Dilation of the Vessels in a Dog's Tongue," Prof A. D. Ado, Deputy,  
Chair of Pathol Physiol, Corr Mem, Acad Med Sci, USSR; D. B. Pen'kovskaya-Shmul'yan,  
Chair of Pathol Physiol, Kazan Med Inst, 4½ pp

"Arkhir Patol" Vol X, No 1

Dilation of vessels due to allergy is a phenomenon which has been little studied.  
Authors discuss experiments on normal dogs, on sensitized dogs, with absence of  
parasympathetic innervation of the tongue vessels, for isolation of acetyl-choline, and  
histamine, and determining the sensitivity of the dog's tongue vessels to acetylcholine.  
Submitted, 11 Feb 1947.

PA 41T69

PEN'KOVSKIY, B. R. Dr. Med Sci -- (diss) "Certain Biochemical Changes  
of the Blood and Peripheral Lymph During Experimental Fever," Leningrad,  
1960, 31 pp, 300 copies (Institute of Experimental Medicine, AMS USSR)  
(KL, 47/60, 106)

PERKOVSKIY, B.R., Doc Med Sci--(disc) "Certain biochemical changes  
of the blood and peripheral lymph in experimental fever." Izv, 1958.  
26 pp (Inst of Experimental Medicine, Acad Med Sci USSR), 250 copies  
(RL, 48-58,106)

63-

PEN'KOVSKIY, F.; MISARENKO, G.

Establishing year-round maintenance of machinery and equipment at grain procurement stations and centers of Moscow Province. Muk.-elev.prom. 26 no.2:6-8 F '60. (MIRA 13:6)

1. Nachal'nik Moskovskogo oblastnogo upravleniya khleboproduktov (for Pen'kovskiy). 2. Nachal'nik tekhnicheskogo otdela Moskovskogo oblastnogo upravleniya khleboproduktov (for Misarenko).

(Moscow Province--Grain elevators--Equipment and supplies)  
(Grain-handling machinery--Maintenance and repair)



LEN'KOVSKIY, G.V.

The 1561 measuring capacitor box. Triborostromer no. 124-26  
Mr. 164. (MTR. 17.6)

L 29880-66  
 ACC NR: AP6013208 SOURCE CODE: UR/0421/66/000/002/0120/0122  
 AUTHOR: Pen'kovskiy, V. I. (Novosibirsk) // B  
 ORG: none  
 TITLE: Unsteady state pressure-no pressure movement in a slit-shaped trench  
 SOURCE: AN SSSR. Izvestiya. Mekhanika zhidkosti i gaza, no. 2, 1966, 120-122  
 TOPIC TAGS: filtration, soil property  
 ABSTRACT: The article treats the simplest case of the problem, that is, unsteady state pressure-no pressure movement in a stratum with a permeable top and bottom, simulated by a slit-shaped trench. Let it be assumed that in a stratum with a length  $L$ , a width  $m$ , and with a pressure  $H = \text{const}$ , at  $x = 0$ , the instantaneous pressure is lowered in such a manner that there are formed two regions varying with time: region (1) with flow from a free surface and region (2) with movement under pressure. The shifting break away point of the free surface is called the critical point and its abscissa is designated as  $x_k$ . (See Figure 1).

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L 29880-66

ACC NR: AP6013208

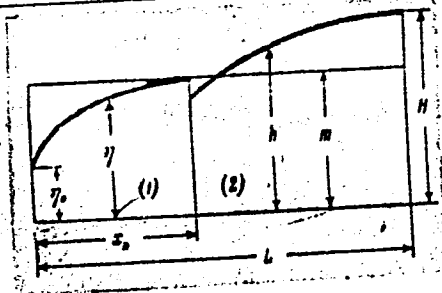


Figure 1.

It is assumed that on the free surface right up to the point  $x_*$  there is established, generally speaking, a negative pressure  $-h_v$ ; here  $0 \leq h_v \leq h_v$ , where  $h$  is the atmospheric pressure. It is assumed that  $\eta(x,t)$  is the ordinate of the free surface and that  $H(x,t)$  is the pressure. The equation of continuity of the flows:

$$\frac{\partial}{\partial x} \left( \eta \frac{\partial \eta}{\partial x} \right) = \frac{\sigma}{k} \frac{\partial \eta}{\partial t} \quad (0 \leq x \leq x_*)$$

$$\frac{\partial^2 h}{\partial x^2} = 0 \quad (x_* < x \leq L)$$

in dimensionless quantities has the form

Card 2/3

L 29880-66

ACC NR: AP6013206

$$\frac{\partial}{\partial \xi} \left( \eta \frac{\partial \eta}{\partial \eta} \right) = \frac{\partial \eta}{\partial \tau} \quad (0 < \xi < \xi_0(\tau)) \quad (1)$$

$$\frac{\partial^2 h}{\partial \xi^2} = 0 \quad (\xi_0(\tau) < \xi < L) \quad (2)$$

$$\left( \tau = \frac{k}{mg} t, \xi = \frac{x}{m} \right)$$

The above theoretical considerations were verified in a simulated slit-shaped trench by a series of experiments, the results of which are shown in a curve. The results show that a theoretical first approximation yields sufficiently good results for practical application. Orig. art. has: 9 formulas and 2 figures.

SUB CODE: 08, 20/ SUBM DATE: 20Mar65/ ORIG REF: 006

Cord 3/3

PEN'KOVSKIY, V.I. (Novosibirsk)

Diffusion coefficient for the equation of moisture flow in soils.

Izv. AN SSSR Mekh. i mashinostr. no.6:149-152 N-D '64.

(MIRA 18:2)

PEN'KOVSKIY, V.

Thanks to the innovators! Mast. ugl. no.10:27 0 '59. (MIRA 13:3)

1. Predsedatel' pervichnoy organizatsii Vsesoyuznogo obshchestva izobretateley i racionalizatorov v shaktoupravlenii No.3-4 "Zhdanovskoye".

(Donets Basin--Coal mines and mining)

PEN'KOVSKIY, V.M.

Concerning V.P. Viktorina", article "Current status of roentgenological services in the R.S.F.S.R." Vest. rent. i rad. 36 no. 2:79-82 Mr-Apr '61. (MIRA 14:4)

1. Glavnyy rentgenolog Kuybyshevskogo gorzdrava.  
(RADIOLOGY, MEDICAL) (VIKTURINA, V.P.)

AM4035372

BOOK EXPLOITATION

s/

Kabakchi, Andrey Mikhaylovich; Lavrentovich, Yaroslav Iosifovich; Pen'kovskiy, Vladimir Vladimirovich

Chemical dosimetry of ionizing radiation (Khimicheskaya dozimetriya ioniziruyushchikh izlucheni), Kiev, Izd-vo AN UkrSSR, 1963, 155 n. illus., biblio. Errata slip inserted. 2,700 copies printed. (At head of title: Akademiya nauk Ukrainsskoy SSR. Institut fizicheskoy khimii im. L. V. Pisarzhevskogo).

TOPIC TAGS:chemical dosimetry, irradiation

PURPOSE AND COVERAGE: The book covers the theoretical and experimental material accumulated in recent years in the field of chemical dosimetry. Attention is given mainly to the possibility of using methods of chemical dosimetry for the solution of problems that are difficult or impossible to solve using other methods (measuring the absorbed dose in Joules per kilogram, separate determination of the doses of several types of irradiation, measurement of large doses, etc.). The book includes a detailed examination of the technique of determining the value of a dose by chemical methods in practical problems. The book is intended for a wide audience of specialists concerned with measurement of absorbed energy of various types of radiation. It can be recommended for graduate students and students specializing

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AM4035372

in the fields of radiation chemistry, radio biology, and radiation physics.

TABLE OF CONTENTS [abridged]:

Introduction -- 3

Ch. I. Radiation dose and methods of measuring it -- 5

Ch. II. Fundamentals of chemical dosimetry -- 21

Ch. III. Methods of chemical dosimetry -- 53

Ch. IV. Determining the doses of various types of radiation by chemical methods -- 136

SUB CODE: GP, GG

SUBMITTED: 12Oct63

NR REF SOV: 109

OTHER: 321

DATE ACQ: 05Mar64

Card 2/2

*PEN'KOVSKIY, V. V.*

21-58-7-12/27

AUTHORS: Frantsevich, I.N., Corresponding Member of the AS UkrSSR, Kalinovich, D.F., Kovenskiy, I.I., Pen'kovskiy, V.V. and Smolin, M.D.

TITLE: Electrodiffusion of Tungsten in an Iron - Tungsten Alloy  
( Elektrodifuziya vol'frama v splave zhelezo - vol'fram )

PERIODICAL: Dopovidi Akademii nauk Ukrain's'koi RSR, 1958, Nr 7,  
pp 736-739 (USSR)

ABSTRACT: The role which is played in highly heat-resistant alloys by the increase in the strength of interatomic bonds in metal solid solutions is well known. The strength of interatomic bonds is essentially increased by the donor-acceptor interaction between the atoms of elements which compose the alloy. The availability of information on this interaction makes it possible to theoretically base the selection of a composition with optimum characteristics of heat resistance. The electrotransfer method is the best for studying the donor or acceptor ability of the alloy components. This article describes an investigation of tungsten migration in its solid solution in iron being subjected to a constant electric field, which

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21-58-7-12/27

Electrodiffusion of Tungsten in an Iron - Tungsten Alloy

was carried out by means of the radioactive isotope  $W^{185}$ . Experiments on electrotransfer were conducted at 900; 950; 1,000; 1,050; 1,100 and 1,150°C, and at exposure times from 40 to 110 hours. It has been established that in the solid metal solution of tungsten in iron, the former migrates, under the action of a constant electric field, towards the cathode. On the basis of experimental data, velocities of the tungsten atom displacements have been computed, as well as the charges of tungsten ions and transfer ratios at all investigated temperatures. It has been shown that the migration speed and transfer ratio values increase with an increase of temperature from 900 to 1,000°C while the charge remains constant. At a further

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21-58-7-12/27

Electrodifffusion of Tungsten in an Iron - Tungsten Alloy

rise of temperature all these quantities decrease and reach zero at 1,150°C. There are 2 graphs, 1 table and 3 Soviet references.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN UkrSSR  
(Institute of Metalloceramics and Special Alloys of the AS UkrSSR)

SUBMITTED: February 15, 1958

NOTE: Russian title and Russian names of individuals and institutions appearing in this article have been used in the transliteration

1. Iron-tungsten alloys--Diffusion 2. Iron-tungsten alloys--Temperature factors 3. Tungsten isotopes (Radioactive)--Applications

Card 3/3

*PEN'KOVSKIY, V.V.*  
FRANTSEVICH, I.N. [Frantsevykh, I.M.]; KALINOVICH, D.F. [Kalynovych, D.F.]  
KOVENSKIY, I.I. [Kovens'kyi, I.I.]; PEN'KOVSKIY, V.V. [Pen'kovs'kyi,  
V.V.]

Migration of components of solid metal solutions in a direct current  
field. Part 2. [in Ukrainian with summary in English]. Ukr. fiz. zhur.  
Supplement to 3 no.1:64-67 '58. (MIRA 11:6)

1. Institut metalokeramiki i spetsyapliv AN URSR.  
(Ions--Migration and velocity)  
(Solutions, Solid--Electric properties)

FRANTSEVICH, I.M. [Frantsevykh, I.M.]; KALINOVICH, D.F. [Kalynovych, D.F.];  
KOVENSKIY, I.I. [Kovens'kyi, I.I.]; PEN'KOVSKIY, V.V. [Pen'kovs'kyi,  
V.V.]

On the migration of solid metal solution components in a direct  
current field [In Ukrainian with summary in English]. Ukr.fiz.zhur.  
3 no.1:124-133 Ja-F '58. (MIRA 11:4)

1. Institut metalokeramiki spetsial'nikh splaviv AN URSR.  
(Heat resistant alloys)  
(Electric fields)

PEN'KOVSKIY, V. [Pen'kovs'kiy, V.], aspirant

An electron is looking for its partner. Nauka i zhyttia 12  
no.3:56-59, 64 Mr '63. (MIRA 16:11)

PEN'KOV'S'KIY, V. [Pen'kovs'kyi, V.], aspirant

Reaction accelerated a million times. Nauka i zhyttia 13 no.7:  
25-27 JI '63. (MIRA 16:10)

1. Institut fizicheskoy khimii im. L.V.Pisarzhevskogo AN UkrSSR.



*Pen'kovskiy, V.V.*

FRANTSSEVICH, I.N. [Frantsevych, I.M.]; KALINOVICH, D.F. [Kalynovych, D.F.];  
KOVENSKIY, I.I. [Kovens'kyi, I.I.]; PEN'KOVSKIY, V.V. [Pen'kovs'kyi, V.V.]

Migration of the components of solid solutions of metals in the field  
of a direct current. Part 3 [with summary in English]. Ukr.fiz.zhur.  
3 no.4:552-559 J1-Ag '58. (MIRA 11:12)

1. Institut metallokeramiki i spetsial'nykh splavov AN USSR.  
(Diffusion) (Solution, Solid) (Iron)

AUTHORS: Frantsevich, I. N., Kalinovich, D. F., SOV/20-121-2-23/53  
Kovenskiy, I. I., Pen'kovskiy, V. V.

TITLE: The Role of Iron as an Acceptor in an Iron-Carbon Alloy  
(Ob aktseptornoy roli zheleza v zhelezo-uglerodistom splave)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2,  
pp. 277 - 279 (USSR)

ABSTRACT: The stability of the interatomic binding in the crystal  
lattice is essentially important for a number of properties  
as e.g. the heat resistance. The stability of the binding  
depends on the donor-acceptor interaction of the atoms of the  
alloyed components with the atoms of the base metal of an  
alloy. From the number of indirect methods of investigating  
the donor-acceptor interaction (X-ray structure-, magnetic-,  
thermochemical analysis, measurement of the electric resistance  
etc.) the most effective method is that of electric transfer  
- the migration of the atoms of the alloy component in a  
steady electric field. In their investigation the authors  
used samples of Fe-C-alloys with 0,6 mm diameter and 60 mm  
length, produced from electrolytic iron with 1% C; the central

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The Role of Iron as an Acceptor in an Iron-Carbon Alloy SOV/20-121-2-23/53

parts of the samples were covered electrolytically by radioactive  $\text{Fe}^{59}$ . The coordinates of the radioactive investigation zones were measured by means of a comparator. The investigations were carried out in the temperature range of from 900 to  $1100^{\circ}\text{C}$ , the samples were exposed to these temperatures for from 12 to 40 hours. The displacement of the boundaries of the activated zones is in the order of some tenths of a mm up to some mm (the displacement of the anode boundary is almost ten times higher than the displacement of the cathode boundary, if  $T < 1000^{\circ}$ ), the velocity of displacement of the zone boundaries is about some  $10^{-6}\text{cm/sec}$  and decreases with increasing  $T$ . If  $T = 1100^{\circ}\text{C}$  a migration practically does not take place any longer (see Table 1) There are 1 figure, 1 table, and 15 references, 6 of which are Soviet.

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov Akademii nauk USSR (Institute of Powder Metallurgy and Special Alloys, AS USSR)

Card 2/3

The Role of Iron as an Acceptor in an Iron-Carbon Alloy SOV/2o-121-2-23/53

PRESENTED: January 15, 1958, by G.V.Kurdyumov, Member, Academy of Sciences,  
USSR

SUBMITTED: January 8, 1958

Card 3/3

PHASE I BOOK EXPLOITATION SOV/3624	
Akademiy nauk Ukrainy SSR. Institut metallokorozumiv i spetsial'nykh splavov	
Metallokorozumivnyy materialy i metody ih zasledovaniy i informatsionnyy materialy (Sposoby zasledovaniy i metody ih informatsionnyy informatsionnyy materialy) Kiev, Izd-vo AN UCRSR, 1959. 55 p. 1,500 copies printed.	
M. of Publishing House: I.V. Kleina; Tech. Ed.: A.M. Lisovets Editorial Board: I.M. Pratsivich, I.M. Podorchenko, O.S. Platsenko, O.V. Samonov (Resp. Ed.), V.N. Yermashko, and V.N. Paderno.	
PURPOSE: This collection of articles is intended for scientific workers, designers, and engineering and technical workers in the metallurgical, machinery-manufacturing and other branches of industry.	
CONTENTS: In this collection of articles the authors describe the production of carbides, nitrides and other heat resisting compounds, giving their physicochemical and mechanical properties. Their thermal processing and the processing installations are also described. A new method is proposed for the production of rods from refractory compounds. Certain compounds are analyzed, and the energy dissipation in materials during high-frequency mechanical vibrations is determined. No personalities are mentioned. There are 7 schematic drawings, 7 diagrams, 6 tables and 17 references, 16 of which are Soviet.	
Podorchenko, I.M., and Yu.B. Yermolovich. Installation for Determining the Kinetics of Evaporation and the Vapor Tension of Refractory Metals	17
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Verkhovskiy, T.S. Preparation of Titanium Nitride from Titanium Sponge	46
Verkhovskiy, T.S. Analysis of Vanadium Silicide	50
Samonov, O.V., and O.G. Seraya. New Method of Preparing Nitrides from High-Melting Compounds	53
Samonov, O.V., T.S. Verkhovskiy, M.M. Antonova, and T.V. Dubovik. Preparation of the Nitrides of High-Melting Metals	53

PEN'KOVSKIY V.V.

PEN'KOVSKIY, V.V.

Effect of neutron irradiation on high-melting compounds and  
cermets. Porosh. met. 1 no.5:74-79 S-0 '61. (MIRA 15:6)

1. Institut metallokeramiki i spetsial'nykh splavov AN USSR.  
(Ceramic metals)  
(Metals, Effect of radiation on)

15.2630  
E2c(1)/E2c(m)

6.3300

26642  
S/051/61/011/003/003/003  
E132/E435JAH  
JAS(WH)  
MDW(JD)

AUTHORS: Samsonov. G.V. and Pen'kovskiy. V.V.

TITLE: A study of the emissive power of certain refractory compounds in the infra-red region.

PERIODICAL: Optika i spektroskopiya, 1961, Vol.11, No.3, pp.410-414

TEXT: Compositions studied by the authors were limited to two types of mixtures, viz. SiC-MoSi<sub>2</sub> and SiC-Si<sub>3</sub>N<sub>4</sub>-MoSi<sub>2</sub>. All these were found to resist oxidation when heated in air up to 1400 - 1500°C. The two-component mixtures of SiC-MoSi<sub>2</sub> were prepared with the SiC contents of 60, 80 and 85%; the three component mixtures were composed of SiC, MoSi<sub>2</sub> and Si. The amount of the latter corresponded to the stoichiometric requirement for Si<sub>3</sub>N<sub>4</sub>. The particle size was less than 53 μ in the case of Si and MoSi<sub>2</sub> and less than 10 μ in the case of SiC. The samples were prepared in the usual way, by compounding with a bakelite solution, pressing and squeezing out to form rods of 5 to 6 mm dia, which were subsequently dried at room temperature followed by drying at 150°C and final sintering at 500°C, in the atmosphere of hydrogen in the case of SiC-MoSi<sub>2</sub>, and nitrogen in the case of SiC-Si<sub>3</sub>N<sub>4</sub>-MoSi<sub>2</sub>. The samples were heated up to 1500°C and did not

Card 1/3

A study of the emissive power of ...

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S/051/61/011/003/003/003  
E132/E435

show any signs of cracking after 6 hours of heating. They were mounted in water-cooled clamps, but the temperature along the rods was found to be very uniform. The emission spectra of the above samples were studied with the help of a recording infra-red spectrometer within the interval of 4 to 15  $\mu$ . The duration of emission of each spectrum was 17 minutes. The results were correlated for the general background of the dispersed light; the final intensity readings were taken on a mirror galvanometer with a scale accuracy of 1 mm. The emissivity was referred to the standard SiC globar, and plotted as relative intensity vs. wavelength for each sample. It was shown that the intensities of emission of the SiC-MoSi<sub>2</sub> and SiC-Si<sub>3</sub>N<sub>4</sub>-MoSi<sub>2</sub> samples were identical in the region of 4 to 14  $\mu$ . The positions of maxima in the emission spectra of SiC were not affected by the addition of 3 to 14% mol of MoSi<sub>2</sub>. Additions of 6% mol of Si<sub>3</sub>N<sub>4</sub> to SiC caused displacement of maxima towards the shorter wavelengths. Acknowledgments are expressed to A.F. Mal'nev and A.F. Yatsenko for assistance. There are 2 figures, 3 tables and 10 references: 4 Soviet and 6 non-Soviet. The four most recent references to English language publications read as follows: R.A. Friedel, Card 2/3



PHASE I BOOK EXPLOITATION SOV/6083

Pen'kovskiy, Vladimir Vladimirovich

Deystviye oblucheniya na metally i nekotoryye tugoplavkiye materialy (Effect of Irradiation on Metals and Certain Refractory Materials). Kiyev, Izd-vo AN UkrSSR, 1962. 182 p. 1,600 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut metallokeramiki i spetsial'nykh splavov.

Resp. Eds.: G. V. Samsonov, Corresponding Member, Academy of Sciences UkrSSR, and S. G. Tresvyatskiy, Professor, Doctor of Technical Sciences; Ed.: Z. S. Pokrovskaya; Tech. Ed.: M. I. Yefimova.

PURPOSE: This book is intended for specialists in the fields of solid-state physics, physics of metals, and in the technology of refractory compounds.

Card 1/4

Effect of Irradiation on Metals (Cont.)

SOV/6083

**COVERAGE:** The theory of the effect of irradiation with neutrons and other elementary particles on various materials is described. Data are presented on structural changes, phase transformations, and changes in the electrical, magnetic, optical, and strength properties of materials resulting from exposure to radiation. Types of materials most resistant to radiation in nuclear reactors are indicated. No personalities are mentioned. There are 500 references, mostly non-Soviet.

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Effect of Irradiation on Metals (Cont.)

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AVAILABLE: Library of Congress

SUBJECT: Metals and Metallurgy

Card 4/4

S/125/62/000/002/004/010  
D040/D113

AUTHORS: Pen'kovskiy, V.V.; Samsonov, G.V.

TITLE: Electrodes of refractory compounds for underwater oxy-electric steel cutting

PERIODICAL: Avtomaticheskaya svarka,<sup>15</sup>/no.2, 1962, 39-43

TEXT: Highly durable tubular electrodes of titanium carbide with a stabilizing coating have been developed for underwater steel cutting and tested by the TsNIIsvyazi Ministerstva Svyazi SSSR (Central Scientific Research Institute of Communications, Ministry of Communications of the USSR). Information on the experiments in which the new electrodes were produced, and on all electrode and coating materials experimented with, is given. The experiments were conducted in view of the very high consumption of existing underwater-cutting electrodes which have to be replaced too frequently and cause various difficulties. The electrode design (Figure) is the conventional one for cutting by the oxy-electric method in which metal is melted by electric arc and blown off by a jet of oxygen from the duct in the electrode. Tubular electrodes, containing refractory carbides and borides, and compounds of silicon and boron carbides,

Card 1/1 3

Electrodes of refractory compounds ...

S/125/62/000/002/004/010  
D040/D113

were produced. The diameter of the electrodes was 9-10 mm and the length 250 mm. Tubular blanks were produced from powders mixed with bakelite varnish or with starch paste and extruded through a die by a method previously described (Ref.7: Samsonov, G.V., Kisliy, P.S., Dopovidi AN URSR, no.1, 46, 1959), cut to lengths, and then dried and sintered in an induction furnace. Sintered tubes were coated with boron nitride or silicon nitride-base coatings, as well as a compound of the formula  $\text{Si}_x\text{C}_y\text{O}_z$  called "siloksikon". The coating permits maintaining stable arc burning through sublimation and dissociation of  $\text{Si}_3\text{N}_4$  and BN, and forming a shielding nitrogen atmosphere around the electrode end. Potassium ferrocyanide was added to increase ionization. All electrode types were tested underwater in the Malaya Neva river by cutting 10 and 15 mm plates of St.3 (St.3) steel by the conventional method. Electrodes of titanium carbide were evidently the best and 6 to 10 times more durable than the 27P-1 (EPR-1) metal electrodes. With all titanium carbide electrodes, the arc excitation was easy, the arc burning steady, the cuts clean and the quantity of slag insignificant. The authors thank M.M.Aleksandrov, N.M.Madatov and S.G.Agroskin for assistance in experiments. A.I. Chernenko, G.V. Samsonov and A.I. Shlyamin are mentioned. There is 1 figure and 9 references; 8 Soviet and 1 non-Soviet-bloc.

Card 2/3

Electrodes of refractory compounds ... S/125/62/000/002/004/010  
D040/D113

ASSOCIATION: Institut metallokeramiki i spetsial'nykh splavov AN USSR  
(Institute of Powder Metallurgy and Special Alloys, AS UkrSSR)

SUBMITTED: February 10, 1961

Card 3/4 3

KABAKCHI, Andrey Mikhaylovich; LAVRENTOVICH, Yaroslav Iosifovich;  
PEN'KOVSKIY, Vladimir Vladimirovich; KONOZENKO, I.D.,  
doktor tekhn. nauk, otv. red.; POKROVSKAYA, Z.S., red.;  
TURBANOVA, N.A., tekhn. red.

[Chemical dosimetry of ionized radiations] Khimicheskaya  
dozimetriya ioniziruyushchikh izlucheni. Kiev, Izd-vo  
USSR, 1963. 155 p. (MIRA 17:1)



PEN'KOVSKIY, V.V.

Compounds with conjugated double bonds. Usp. khim. 33 no.10:1232-  
1263 0 '64. (MIRA 17:11)

1. Institut fizicheskoy khimii imeni Pisarzhevskogo /N UkrSSR.

L 37009-66 EWT(m)/EWP(j) RM/JW

ACC NR: AF6018596

SOURCE CODE: UR/0379/66/002/002/0282/0285

AUTHOR: Pen'kovskiy, V. V.

ORG: Institute of Physical Chemistry im. L. V. Pisarzhevskiy, AN UkrSSR, Kiev  
(Institut fizicheskoy khimii AN UkrSSR)

TITLE: Formation of ion radicals in the reaction of tetracyanoethylene with pyridine and its derivatives

SOURCE: Teoreticheskaya i eksperimental'naya khimiya, v. 2, no. 2, 1966, 282-285

TOPIC TAGS: ion radical, pyridine, ethylene, cyanogen compound, EPR spectrum

ABSTRACT: The author found that when tetracyanoethylene (TCE), a strong electron acceptor, is dissolved in pyridine and in 2,4- or 2,6-lutidine under a vacuum of  $10^{-2}$  mm Hg or higher, a strong ESR spectrum is produced. The concentration of unpaired electrons immediately after dissolution is  $5 \times 10^{20}$  per g of TCE, which corresponds to the conversion of 10% of TCE molecules into ion radicals. Storage of the samples causes a gradual decrease of the signal. The ESR spectrum obtained consists of nine components. The splitting between the components is  $1.56 \pm 0.05$  Oe; the ratio of intensities is 1:4:10:16:19:16:10:4:1, which corresponds to splitting on four equivalent  $N^{14}$  nuclei. The doublet splitting observed is thought to be due to the interaction of an unpaired electron with a proton. When an electron is transferred from the base to TCE, the formation of an ion-radical complex resembling a quaternary salt is probably

Card 1/2

PEN'KOVSKIY, V.V.; KUTS, V.S.

Interaction of polyphenylacetylene with electron-acceptor molecules.  
Teoret. i eksper. khim. 1 no.2;254-259 Mr-Ap '65. (MIRA 18:7)

1. Institut fizicheskoy khimii imeni L.V.Pisarzhevskogo AN UkrSSR,  
Kiyev.

L 10374-65 EWT(1)/EPA(s)-2/ERG(k)/ENT(e)/ENP(f)/T/EPG(g) DELA/DO-1/DO-2/DO-3/DO-4/DO-5/DO-6/DO-7/DO-8/DO-9/DO-10  
 LIT(1)/REL(ASD(s)) (AS(tc)) (ESL(s))/RADW(1) R-EM(1) (EM(1))/DO-1/DO-2/DO-3/DO-4/DO-5/DO-6/DO-7/DO-8/DO-9/DO-10

AUTHOR: Popkovskiy, V. V.

10374

SOURCE: Vyssokomolekulyarnyye soyedineniya, v. 6, no. 10, 1964, 1755-1757

TOPIC TAGS: Organic semiconductor, semiconducting polymer, hetero-organic polymer, lutidine, butadiene, zinc chloride, electron paramagnetic resonance

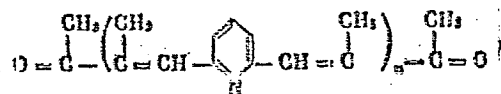
ABSTRACT: A new polymer with conjugated double bonds, containing pyridine rings in the backbone was prepared. It is noted that polymers with hetero atoms in the backbone are of interest because their electrical conductivity, as a rule, is high. In this case, 2,6-lutidine was reacted with 2,3-butadiene in the presence of anhydrous zinc chloride.

Card 1/3

L 10374-53

ACCESSION NR: AP4047197

and acetic acid. The average molecular weight was about 1000. The polymer was assigned the following structure



which was confirmed by IR spectroscopy, elemental analysis, and end-group determination. The polymer gave an EPR signal which changed rapidly on oxidation. The polymer was found to be soluble in a number of organic solvents and gave a clear solution in chloroform.

**"APPROVED FOR RELEASE: 06/15/2000**

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APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001239920016-8"

L 22549-55  
ACCESSION NR: AP4047998

intermolecular complexes with a charge transfer in the solid phase of the materi-  
als. "The authors thank L. N. Login for conducting spectral analysis." "R. S. \_\_\_\_\_



1973

PENLEVE. P.

Lektsii o trenii. pbr. c frants. I. N. veselovskogo. M., gost-  
ekhizdat, 1954. 316 s.s. chert. 20sm. 4.000 EKZ. 10R. 25K. V Per.  
— (54 -56248)

P 531.4.

CHYTILOVA, M.; KEITEL, W.; UHER, J.; PENNDORF, K.

Bone cysts -- a manifestation of an auto-aggressive disease.  
Acta chir. orthop. traum. Cech. 32 no.4:323-324 Ag '65.

1. Vyzkumny ustav traumatologicky, Brno; Medizinische  
Akademie, Magdeburg, DDR.

PEINER, D.; STRAKHOV, N.

Dispersion caused by rotation. IUn.tekh. 3 no.5:24-25 Hy '59.  
(MIRA 12:7)

(Dispersion)

PROCEDURES AND PROPERTIES INDEX																									
1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
<p>Styktographic coherers. I. Oxidation of the filaments.            D. I. Penner. <i>J. Tech. Phys.</i> (U. S. S. R.) 7, 2227-30 (1937); <i>Chem. Zentr.</i> 1939, I, 205. — By use of the "styktographic method" of Arkad'ev (cf. <i>Sotsialist. Rekonstruktsiya i Nauka</i> 1935, No. 2, 34-9 and C. A. 34, 3175'). — A study was made of the lower threshold of sensitivity of coherers by use of a d. c. which was varied by the oxidation of the brass filings used as filler at different temps. (100-600°). On the basis of the exptl. results the use of coherers contg. filings which have been oxidized at 170-200° and which are arranged in a layer 3 mm. in length and of a thickness equal to <math>\frac{1}{2}</math> to <math>\frac{1}{3}</math> the internal diam. of the tube is recommended. M. G. Moore</p>																									
A12-51A METALLURGICAL LITERATURE CLASSIFICATION																									
120000 121000 122000 123000 124000 125000 126000 127000 128000 129000 130000 131000 132000													133000 134000 135000 136000 137000 138000 139000 140000 141000 142000 143000 144000 145000												

2372

538.56 - 3

The making visible and photographing of the field of Hertzian waves. (Method of "Spark Stereography"). ARKADIEV, W. K., AND PENNER, D. I. C.R. (Doklady) Acad. Sci. U.R.S.S., 28, pp. 315-317, Aug. 10, 1940. Abstr. in Wireless Engr, 20, p. 345, July, 1943.—The method employs a thin layer of metallic particles scattered on a photographic plate or paper which is kept vibrating with sufficient intensity to make the particles vary in their spacing so that the optimum distances for spark formation (under the influence of the u.w.v. field) occur.

Maxwell Lab. Electromagnetism  
Inst. Physics, Moscow State Univ.

33

6870P

11479a\* Visibility of Hertzian Waves. (Russian.) D. I. Penner. "Uchenye Zapiski, Vypusk 134. Fizika. Kulga Platfā" (Scientific Records, Vol. 134, Physics, Vol. 5), Lomonosov's Moscow State University, 1949, p. 153-162.

A study was made of viewing and photographing of centimeter Hertzian waves. Equipment is described and test results are illustrated. 15 ref.

*S.A.  
sect. A*

*Electromagnetic*

538.566 : 778.3 : 621.392.26

7418. Visual observation and photography of waveguide radiation. D. I. FISHMAN. Dokl. Akad. Nauk SSSR, 81, 819-20 (No. 5, 1951) in Russian.

After a brief description of pioneer work in this field by Arkadiev in 1934, experimental techniques are described which enable visual observation of electric fields at the throat of waveguides. A Lebedev vibrator terminating in a spark discharge gap, immersed in paraffin, serves as the generator and is coupled to circular and rectangular waveguides or to dielectric rods, exciting in them decaying waves. The field distribution is made visible by the "quasi-luminescence effect" displayed by metallic powders and filings when placed in the field of Hertzian waves; this was discovered by Arkadiev and Penner. Photographs are shown of electric field distribution of 3 cm waves leaving metal and ebonite waveguides.

A. LANDMAN (R)

*Sverdlovsk Mining Inst. im V. V. Vokhrusheva*

PENNER, D.I., VOROSHILOV, V.P.

Electricity - Experiments

Two demonstrations of A.S. Popov's experiments. D.I. Penner, V.P. Voroshilov.  
Fiz. v shkole, no 4, 1952.

Monthly List of Russian Accessions, Library of Congress, November 1952, UNCLASSIFIED



PENNER, D.I. (g. Sverdlovsk); SELIKHOV, M.M. (g. Sverdlovsk).

Study of three-phase current in the 10th class. Fiz. v shkole 13 no.3:  
38-39 My-Je '53. (MLBA 6:6)

(Electric currents, Alternating--Polyphase)

PENNER, D. I.

"Viewing and Photography Visualization of Microwaves." Cand Phys-Math Sci,  
Ural U, Sverdlovsk, 1954. (RZhFiz, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher  
Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

PEHNER, D.I., (Sverdlovsk); STRAKHOV, N.V., (Sverdlovsk)

Experiments with "daylight" lamps. Fiz. v shkole 15 no.5:52-54  
S-O '55. (MLRA 9:1)

(Electric lighting, Fluorescent)

PENNER, D.I.; STRAKHOV, N.V.

Ionizing particle counters. Fiz. v shkole 16 no.6:44-47  
N-D '56.

(MLBA 9:12)

1. Pedagogicheskiy institut, Sverdlovsk.  
(Geiger-Muller counters)

PENNER, D.I., (Sverdlovsk); STRAKHOV, N.V., (Sverdlovsk)

Using photographic techniques for fixation of microparticles  
in schools. Fiz. v shkole 17 no.1:64-65 Ja-F '57. (MLRA 10:2)

(Photography--Scientific applications)

~~PENNER, D.I.~~  
PENNER, D.I.

Connecting the Geiger counter to the adapter input of a radio receiver. Fiz. v shkole 18 no.1:53-55 Ja-F '58. (MIRA 11:1)

1. Pedagogicheskiy institut, Sverdlovsk.  
(Geiger-Muller counters--Study and teaching)

PENNER, D.I.  
AUTHOR: Penner, D.I. 47-58-1-18/35  
TITLE: Computers of Ionizing Particles (Schetchiki ioniziruyushchikh chastits). Connecting a Geiger Counter to the Adaptor Inlet of a Radio-Receiver (Vklyucheniye schetchika Geygera na adapternyy vkhod radiopriyemnika)  
PERIODICAL: Fizika v Shkole, 1958, # 1, pp 53-55 (USSR)  
ABSTRACT: In this article, the author proposes various circuits to include a Geiger counter into the adaptor inlet of a radio-receiver to replace the stage of lower frequency and the kenotron of the former by the corresponding parts of the latter. It will help the teacher to explain to his pupils the circuit in a Geiger counter, during a class demonstration. A detailed circuit and description are included.  
There is 1 diagram, 1 photo and 1 figure.  
ASSOCIATION: Pedagogicheskiy institut, Sverdlovsk (Pedagogic Institute, Sverlovsk)  
AVAILABLE: Library of Congress  
Card 1/1

47-58-2-24/30

AUTHORS: Penner, D.I., (Sverdlovsk Pedagogical Institute); Kovalev,  
P.G., Honored Teacher of the RSFSR School (Rostov-on-Don,  
13th School)

TITLE: Letters to the Editor (Pis'ma v redaktsiyu)

PERIODICAL: Fizika v Shkole, 1958, Nr 2, pp 84-85 (USSR)

ABSTRACT: In the first letter the author deplores the lack of instru-  
ments and materials for school experiments, especially when  
dealing with nuclear physics. He presents a list of necessary  
instruments. In the second letter the author recommends more  
care in printing illustration in text books.

AVAILABLE: Library of Congress

Card 1/1 1. Nuclear physics-Study and teaching



22(1)

SOV/3-59-3-27/48

AUTHOR: Penner, D.I., Candidate of Physico-Mathematical Sciences, Docent

TITLE: Students Publish Their Own Scientific Journal (Studenty vypuskayut svoj nauchnyy zhurnal)

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 3, pp 57-58 (USSR)

ABSTRACT: "Physics and Astronomy" is the name of the journal issued by the scientific student circle, attached to the chairs of the Physico-Mathematical Department of the Sverdlovsk Pedagogic Institute. The journal is published for the third year and at present Nr 8 is being prepared for publication. Each edition has 80 to 100 pages. The contributors are instructors of of the institute chairs, senior course students, institute graduates, correspondence students and experienced physics teachers of Sverdlovsk. The journal has several sections on scientific subjects, the life of the department and on bibliography. From

Card 1/2

22(1)

SOV/3-59-5-25/34

AUTHOR: Penner, D.I., Candidate of Physico-Mathematical  
Sciences, Docent

TITLE: Prospective Teachers . Lecture to the  
Population

PERIODICAL: Vestnik vysshey shkoly, 1959, Nr 5, pp 79 - 80  
(USSR)

ABSTRACT: Being aware of the importance of acquiring lecturing  
skill by students, the Sverdlovsk Pedagogical In-  
stitute enlists the services of senior course  
students, for disseminating scientific and political  
knowledge among working people. A lecturing  
student group has been organized with the Chair  
of Theoretical Physics and Astronomy. Twenty-four  
of the students have already been admitted as mem-  
bers of the Obshchestvo po rasprostraneniyu politich-  
eskikh i nauchnykh znaniy (Society for the Dissemi-  
nation of Political and Scientific Knowledge ).

Card 1/2

SOV/3-59-5-25/34

Prospective Teachers

Lecture to the Population

For students belonging to this group, lessons are being arranged regularly, in which instructors with lecturing experience present model-lectures, the texts of which are later turned over to the students. Most of the lectures read by the instructors and students are accompanied by multi-colored diapositives and experimental demonstrations. The Chair intends to expand this lecturing activity among the working people, particularly with the participation of students.

ASSOCIATION: Sverdlovskiy pedagogicheskiy institut (Sverdlovsk Pedagogical Institute)

Card 2/2

9,6150 (1482)

23364

S/058/61/000/006/059/053  
A001/A101

AUTHOR: Penner, D.I.

TITLE: A microphotometrical investigation of the field of micro radio waves

PERIODICAL: Referativnyy zhurnal. Fizika, no. 6, 1961, 394-395, abstract 6Zh539  
("Uch. zap. Sverdlsk. gos. ped. in-ta", 1959, no. 17, 31 - 35)

TEXT: The author describes the method of visualization of the field of radio waves by means of the large-scale sparking effect in metallic powders subjected to action of a strong field. If the powder is applied directly to photo-emulsion, a glow can be recorded and the picture of distribution of the wave field in space can be obtained. The pictures of some fields were obtained: diffraction field of a point-like radiation source (in the first maximum region) and field in the waveguide aperture, in the 3-cm wavelength range. At a short exposure, when film blackening does not proceed beyond the limits of a linear section, microphotometry of pictures yields field distribution which agrees qualitatively with the theoretical one.

V. Livshits

[Abstracter's note: Complete translation]

Card 1/1

BABANSKIY, Yu.K.; BALABEKYAN, O.I. (Orenburg); PENNER, D.I.; AVRUKINA, T.E.  
(Leningrad); SVITKOV, L. (Moskva)

Discussion of the draft program of physics for the eight-year  
school and the secondary school of general education with  
industrial training. Fiz.v shkole 20 no.1:62-65 Ja-F '60.

(MIRA 14:10)

1. Gosudarstvennyy pedagogicheskiy institut, Rostov-na-Donu  
(for Babanskiy). 2. Pedagogicheskiy institut, Sverdlovsk (for  
Penner).

(Physics--Study and teaching)

KOMSKIY, David Matveyevich; PENNER, David Ivanovich; DANILEVSKAYA,  
N.V., otv. za vypusk; GORODENSKIY, L.M., red.; MICHURINA,  
N.N., tekhn. red.

[Making devices for demonstrations at popular lectures on  
physical and technological subjects] Izgotovlenie demon-  
stratsionnykh priborov dlia populiarnykh leksiï na fiziko-  
tekhnicheskie temy. Moskva, Oh-vo po rasprostraneniu polit.  
i nauchn. znaniï RSFSR, 1963. 38 p. (MIRA 16:9)  
(Physics--Audiovisual aids)

PENNER, I.A.

Quadratic and skewsymmetric bilinear forms in hyperspace.  
Uch. zap. MGPI no. 243:248-259 '65 (MIRA 19:1)  
Curves with a degenerate absolute in n-dimensional geometry.  
Ibid. :260-273.

KAZAKOVA, L., student; PENNER, L., student; OSPANOVA, M., student

Dynamics of the blood pressure of pregnant women according to data from the Simipalatinsk Maternity Home during 1954 to 1955. Trudy Semipal. med. inst. 2:193-201 '59. (MIRA 15:4)

1. Kafedra gosital'noy terapii (zav.kafedroy - doktor med.nauk, prof. R.Ya.Spivak) i kafedra akusherstva i ginekologii (zav.kafedroy - kand.med.nauk A.A.Kozbagarov) Semipalatinskogo gosudarstvennogo meditsinskogo instituta.

(BLOOD PRESSURE) (PREGNANCY)



BA

A1-5  
Physical Properties  
Molecular Structure

Emission of radiation from diatomic gases. III. Numerical emissivity calculations for carbon monoxide for low optical densities at 300° K. and atmospheric pressure. S. S. Penner, M. H. Ostrander, and H. S. Tsien (*J. appl. Phys.*, 1952, 23, 258-263). The calculations have been made for non-overlapping rotational lines using a dispersion formula for the line-shape representation. Use of the best available experimental data on integrated absorption and rotational line-width leads to calculated emissivities which are in excellent agreement with extrapolated empirical data published by Hottel and by Ulrich. In particular, the theoretical dependence of emissivity on optical density, for small optical densities at 300° K., has been shown to follow experimental observations with satisfactory precision. The calculation of emissivities can be simplified by the use of approx. treatments. C. B. NORTH.

PENNER, Ye.P.

Aleysk Observation Station. Zashch. rast. ot vred. i bol.  
7 no.2:41-44 F '62. (MIRA 15:12)

1. Zaveduyushchaya Aleyskim nablyudatel'nyy punkt.  
(Aleysk District—Plants, Protection of)

ELMFANT, E.; VALIK, A.; DRAPKA, M.; PROCHAZKA, M.; FENNIGEROVA, S.

Personal results and indications for neuroplegia in infants with surgical diseases. Cesk. pediat. 13 no.1:15-20 5 Jan 58.

1. III. detska klinika KU v Praze, prednosta prof. Dr. O. Vychytil  
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To avoid the defects of the usual method of registration of such movements, a cuff has been constructed of easily obtainable materials, its external surface consisting of a 15 cm. strip of bicycle outer tyre covered with a piece of rubber and the internal surface of a piece of surgical-glove rubber measuring 15 x 3.5 cm. The free space is placed in communication with a bicycle valve. The cuff is placed round the subject's neck; its internal pressure measured manometrically must not exceed 15 mm., a pressure which does not interfere with cerebral circulation or cause venous stenosis. With the aid of a Marey drum it is possible to record the carotid pulsations, deglutition movements and movements of the mandible and the head. The effect of deglutition on the plethysmogram and on respiration can also be studied.

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